

with guard grille

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Nominal data

Type	S3G400-ZF03-01	
Motor	M3G074-DF	

Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	200 .. 240
Frequency	Hz	50/60

Method of obtaining data		ml
Speed (rpm)	min ⁻¹	1200
Power consumption	W	165
Current draw	A	1.3
Max. back pressure	Pa	135
Max. back pressure	in. wg	0.54
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	55

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

Data according to Commission Regulation (EU) 327/2011 (prEN 17166)

		Actual	Req. 2015			
01 Overall efficiency η_{es}	%	48.2	28.7	09 Power consumption P_{ed}	kW	0.16
02 Measurement category		A		09 Air flow q_v	m ³ /h	2615
03 Efficiency category		Static		09 Pressure increase p_{fs}	Pa	98
04 Efficiency grade N		59.5	40	10 Speed (rpm) n	min ⁻¹	1255
05 Variable speed drive		Yes		11 Specific ratio*		1.00

Data obtained at optimum efficiency level.

* Specific ratio = $1 + p_s / 100\,000\text{ Pa}$

LU-205311

The efficiency values displayed for achieving conformity with the Ecodesign Regulation EU 327/2011 has been reached with defined air duct components (e.g. inlet rings).
The dimensions must be requested from ebm-papst. If other air conduction geometries are used on the installation side, the ebm-papst evaluation loses its validity/the conformity must be confirmed again.
The product does not fall within the scope of Regulation (EU) 2019/1781 due to the exception specified in Article 2 (2a) (motors completely integrated into a product).



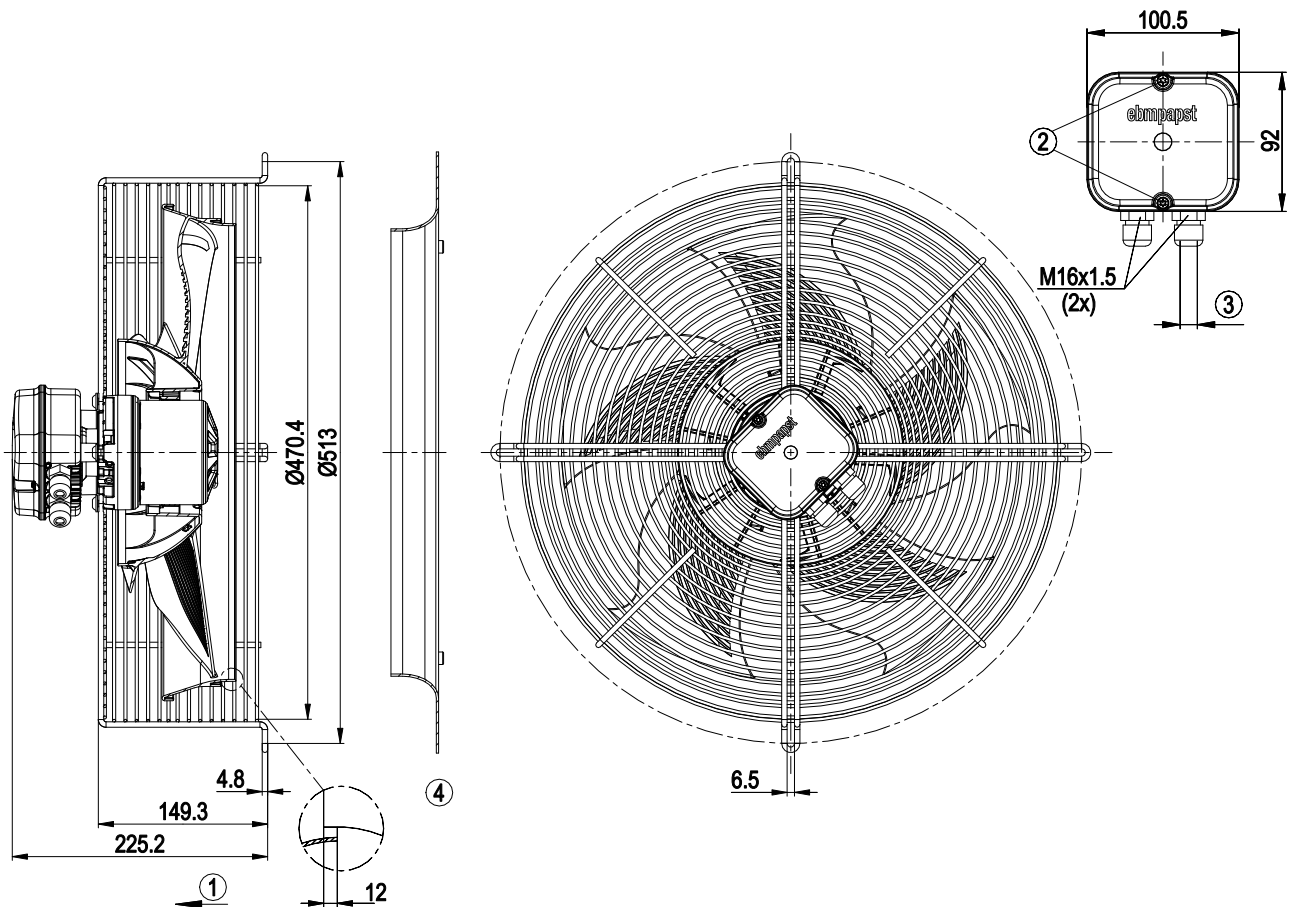
Technical description

Weight	5.64 kg
Size	400 mm
Motor size	74
Rotor surface	Thick-film passivated
Terminal box material	PP plastic
Impeller material	PP plastic, galvanized sheet-metal plate
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	V
Direction of rotation	Clockwise, viewed toward rotor
Degree of protection	IP54
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H1
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Cooling hole/opening	On rotor side
Mode	S1
Motor bearing	Ball bearing
Technical features	- Output 10 VDC, max. 10 mA - Tach output - Power limiter - Motor current limitation - Soft start - Control input 0-10 VDC / PWM - Control interface with SELV potential safely disconnected from the mains - Overvoltage detection - Thermal overload protection for electronics/motor - Line undervoltage detection
EMC immunity to interference	According to EN 61000-6-2 (industrial environment)
EMC interference emission	According to EN 61000-6-4 (industrial environment)
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	<= 3.5 mA
Electrical hookup	Terminal box
Motor protection	Electronic motor protection
With cable	Variable
Protection class assignment	I; If a protective earth is connected by the customer This component for installation may have several local protection classes. This information relates to this component's basic design. The final protection class is based on the component's intended installation and connection.
Conformity with standards	EN 60034-1; EN 60204-1; EN 60335-1; CE
Approval	CSA C22.2 No. 77 + CAN/CSA-E60730-1; EAC; UL 1004-7 + 60730-1



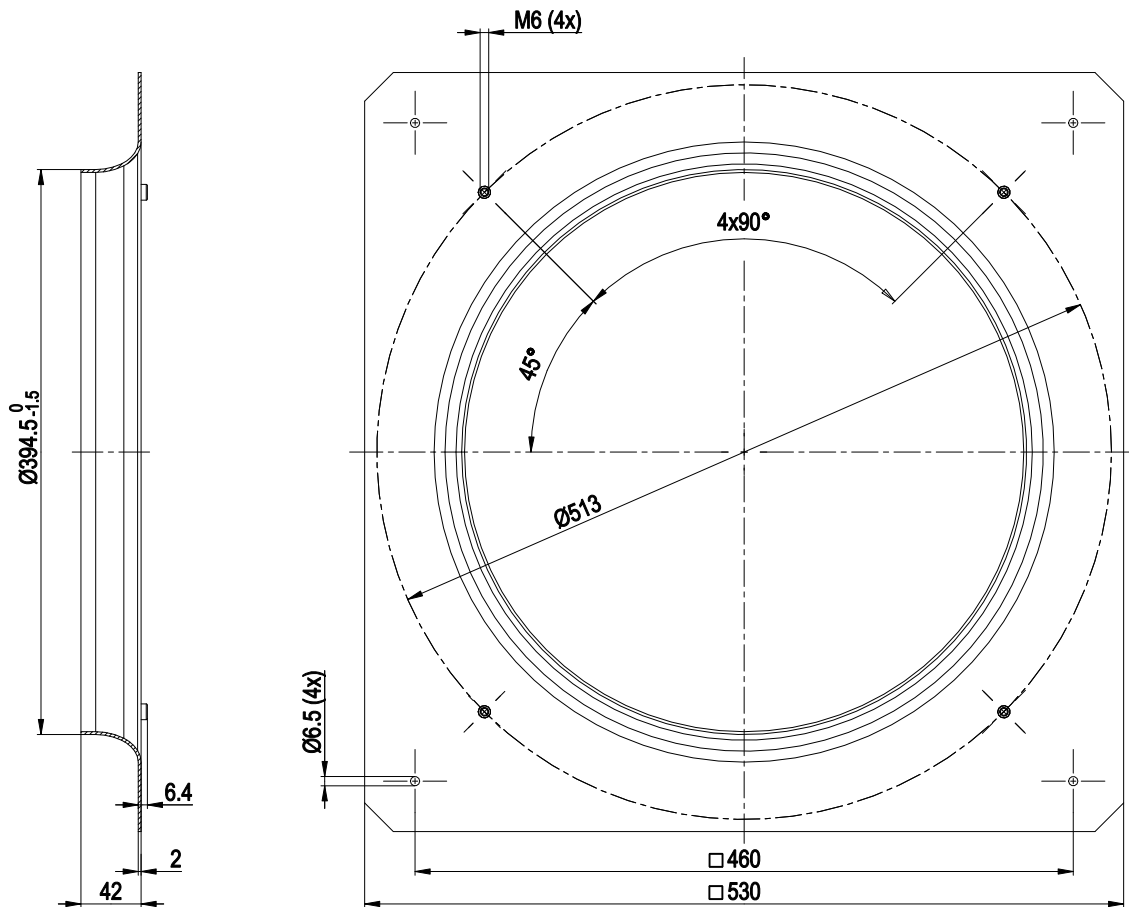
with guard grille

Product drawing



1	Airflow direction "V"
2	Tightening torque 1.5 ± 0.2 Nm
3	Cable diameter max. 7.5 mm, tightening torque 1.3 ± 0.2 Nm
4	Accessory part: Inlet ring 40100-2-4013 not included in scope of delivery

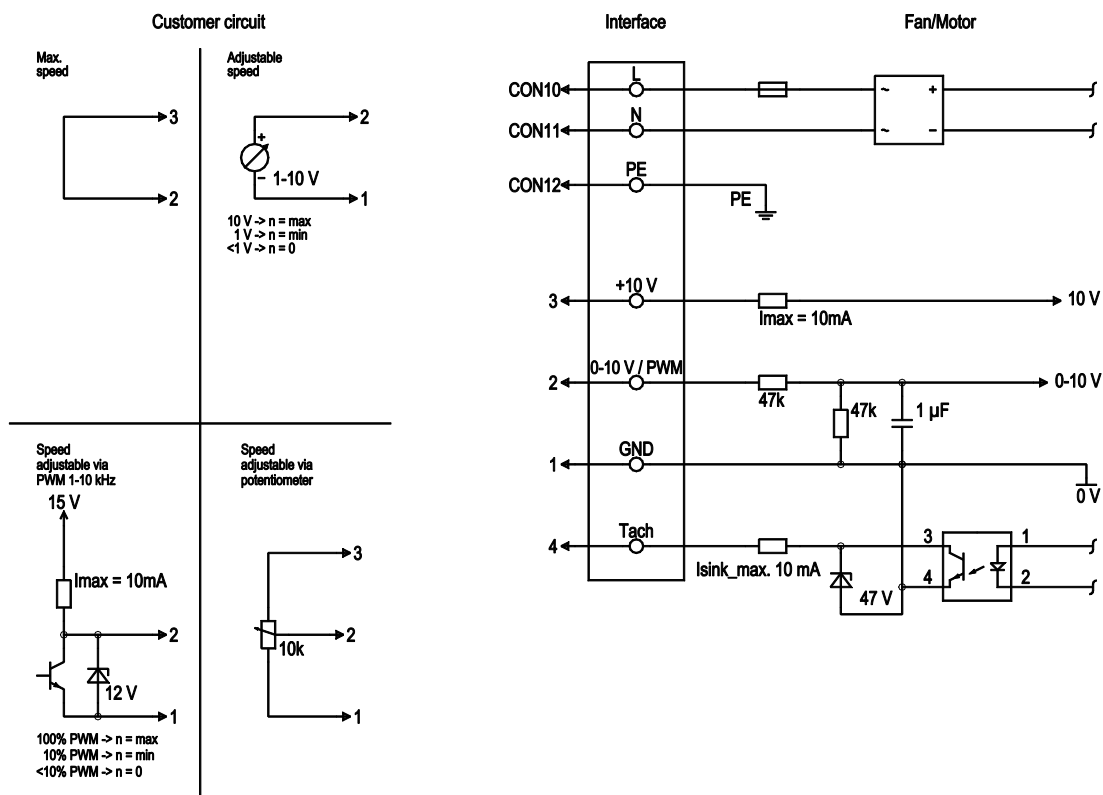
Accessory part



Inlet ring 40100-2-4013

with guard grille

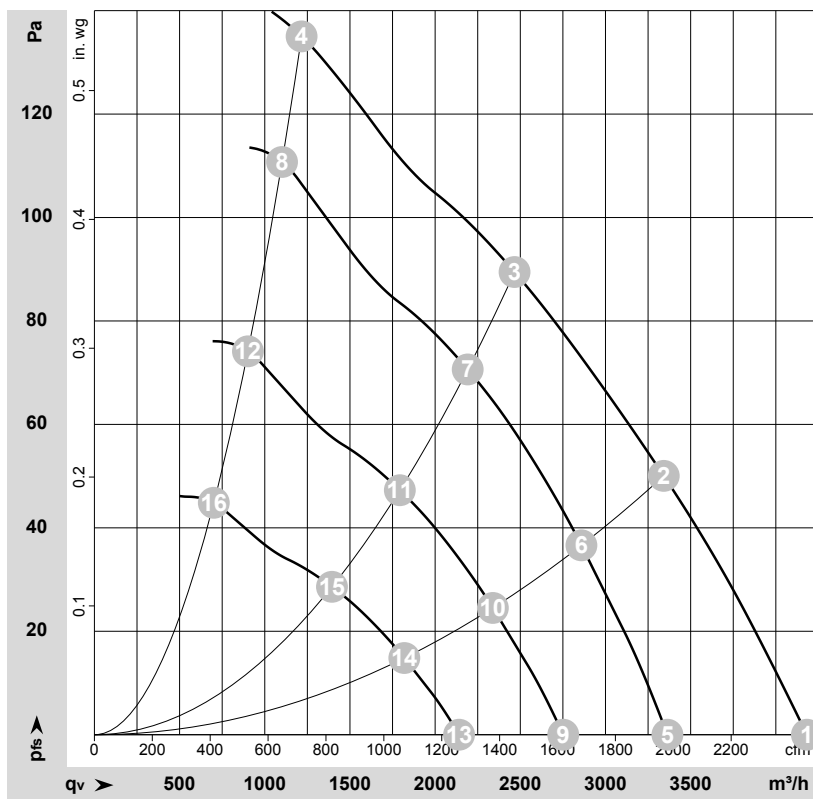
Connection diagram



No.	Conn.	Designation	Color	Function/assignment
	CON10	L	black	Supply connection, power supply, phase, see nameplate for voltage range
	CON11	N	blue	Supply connection, power supply, neutral conductor, see nameplate for voltage range
	CON12	PE	green/yellow	Ground connection
	2	0- 10V PWM	yellow	0-10 V / PWM control input, Ri=100 kΩ, SELV
	4	Tach	white	Tach output, open collector, 1 pulse per revolution, Isink max = 10 mA, SELV
	3	+10 V	red	Fixed voltage output 10 VDC +/-3 %, Imax. 10 mA, short-circuit-proof, power supply for ext. devices (e.g. pot), SELV
	1	GND	blue	Reference ground for control interface, SELV



Curves: Air performance 50 Hz



$$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$$

Measurement: LU-204440-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	Wired	U	f	n	P _{ed}	I	LpA _{in}	LwA _{in}	LwA _{out}	q _v	p _{fs}	q _v	p _{fs}
		V	Hz	min ⁻¹	W	A	dB(A)	dB(A)	dB(A)	m ³ /h	Pa	cfm	in. wg
1	1~	230	50	1370	165	1.30	61	68	72	4180	0	2460	0.00
2	1~	230	50	1285	165	1.30	57	64	68	3340	50	1965	0.20
3	1~	230	50	1240	165	1.30	56	63	67	2465	90	1450	0.36
4	1~	230	50	1200	165	1.30	61	68	72	1215	135	715	0.54
5	1~	230	50	1100	84	0.68	56	62	67	3365	0	1980	0.00
6	1~	230	50	1100	102	0.82	53	60	64	2860	37	1685	0.15
7	1~	230	50	1100	115	0.93	53	60	64	2190	71	1290	0.29
8	1~	230	50	1100	122	0.98	59	66	70	1100	112	650	0.45
9	1~	230	50	900	46	0.37	51	57	62	2750	0	1620	0.00
10	1~	230	50	900	56	0.45	48	55	59	2340	25	1375	0.10
11	1~	230	50	900	63	0.51	48	55	59	1795	47	1055	0.19
12	1~	230	50	900	67	0.54	54	61	65	900	75	530	0.30
13	1~	230	50	700	22	0.18	44	51	55	2140	0	1260	0.00
14	1~	230	50	700	26	0.21	42	48	52	1820	15	1070	0.06
15	1~	230	50	700	30	0.24	41	49	53	1395	29	820	0.12
16	1~	230	50	700	31	0.25	47	54	59	700	45	415	0.18

Wired = Wiring · U = Voltage · f = Frequency · n = Speed (rpm) · P_{ed} = Power consumption · I = Current draw · LpA_{in} = Sound pressure level intake side · LwA_{in} = Sound power level intake side
LwA_{out} = Sound power level outlet side · q_v = Air flow · p_{fs} = Pressure increase

